

5G – Ein Netz zum Anfassen

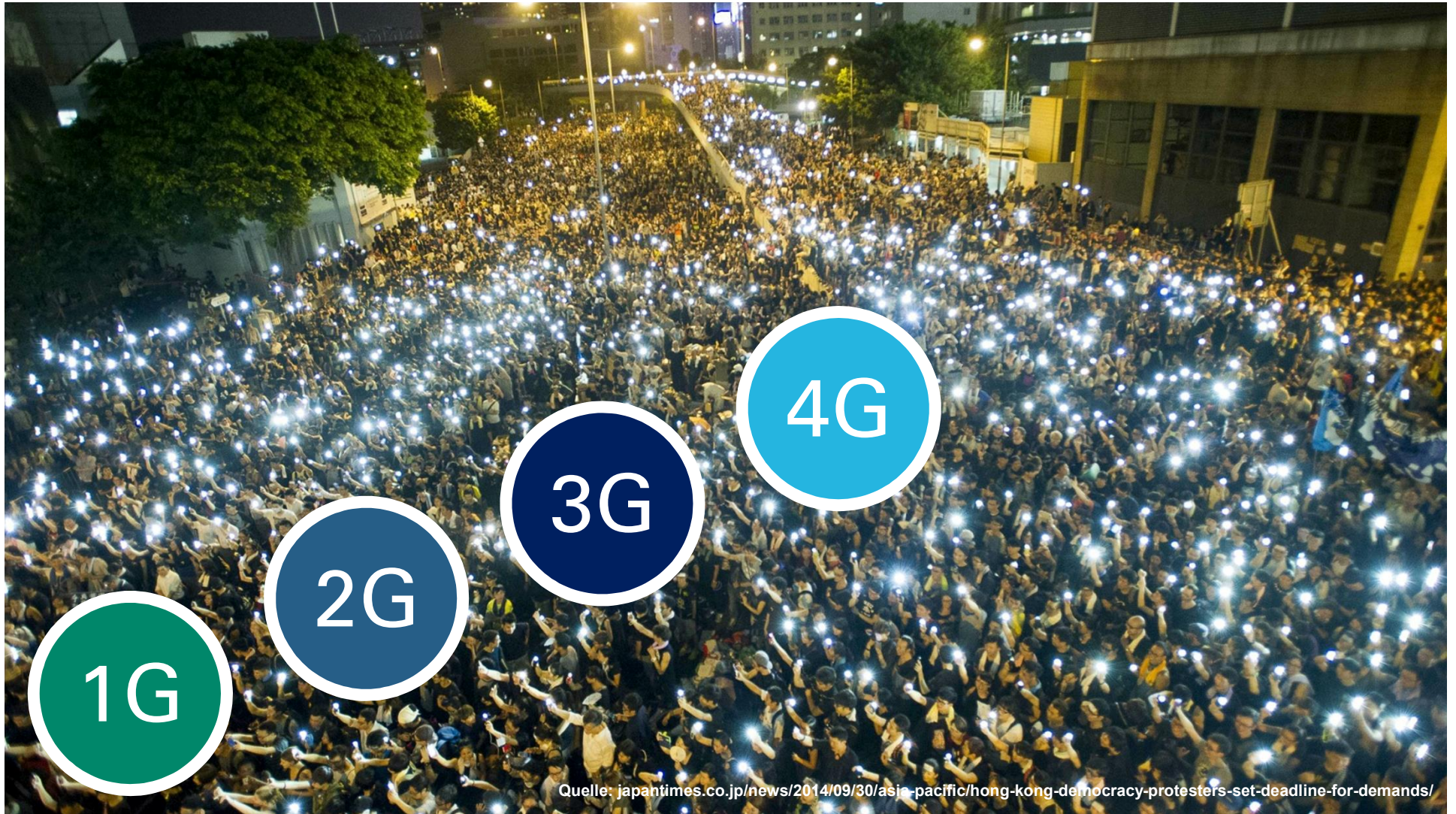
Prof. Dr.-Ing. Dr. h.c. Frank H.P. Fitzek

Deutsche Telekom Lehrstuhl für Kommunikationsnetze

**BOSCH****CLAAS****NEC NOKIA**



Quelle: japantimes.co.jp/news/2014/09/30/asj-pacific/hong-kong-democracy-protesters-set-deadline-for-demands/



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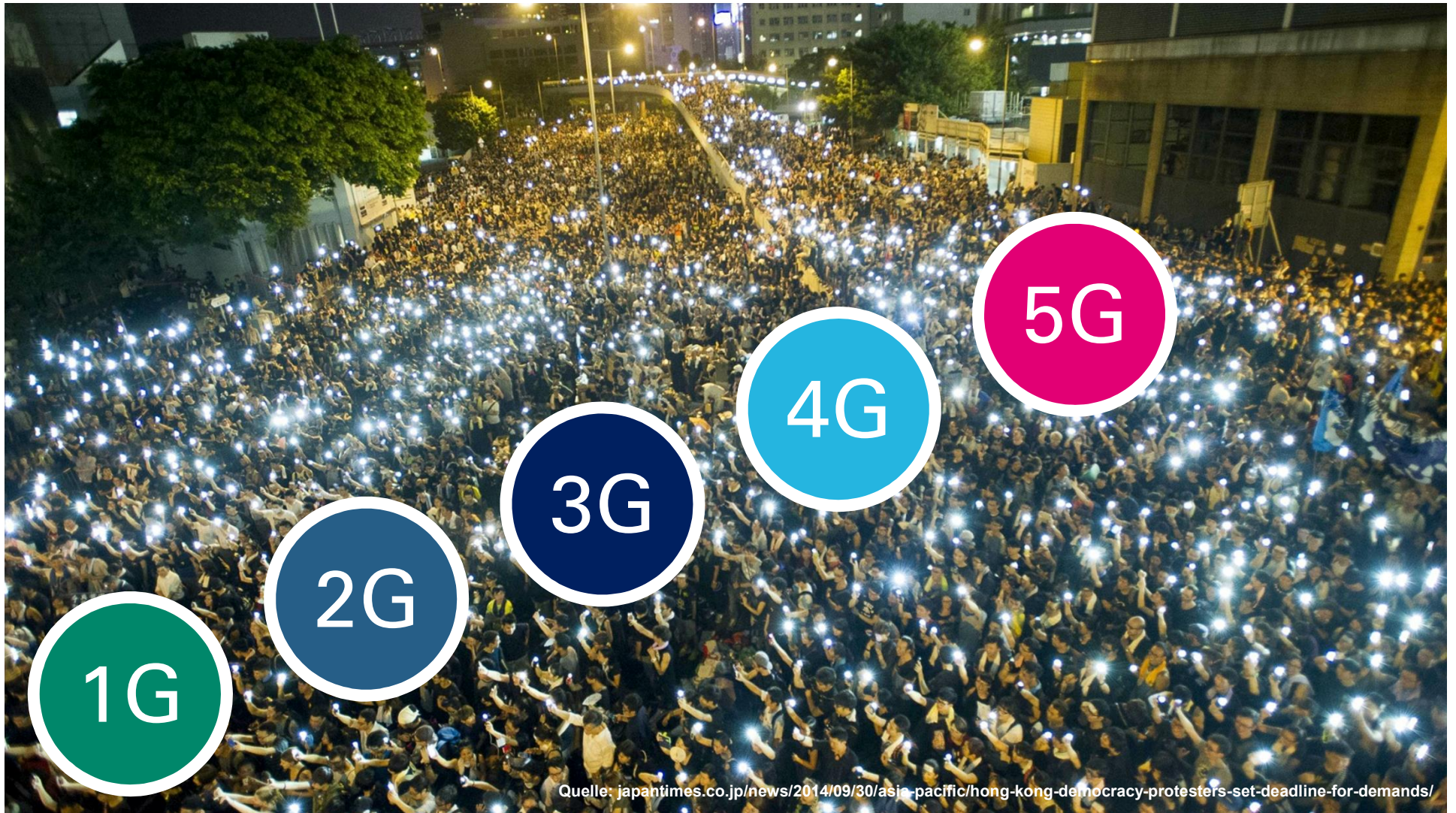


7
Milliarden
2014

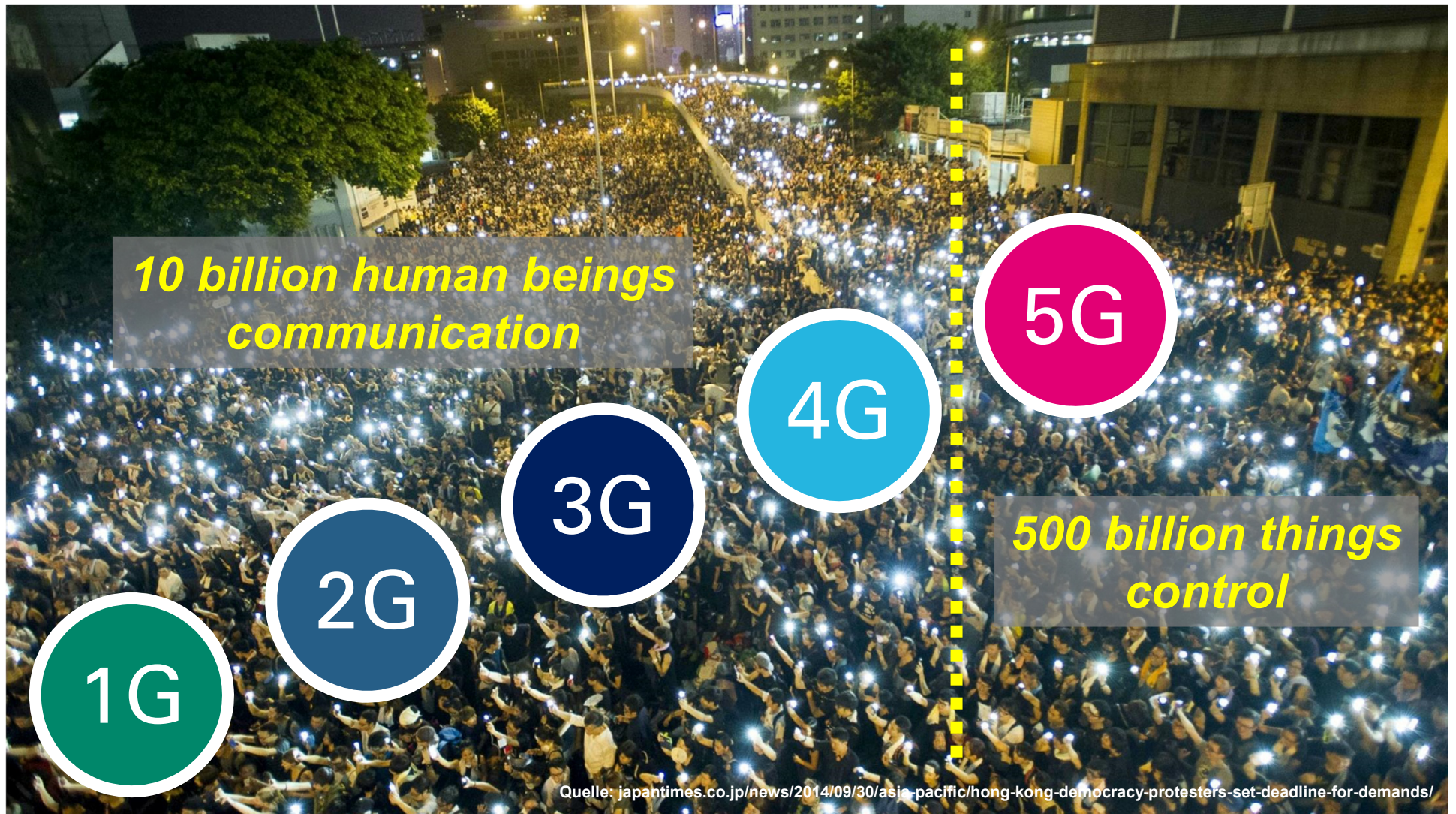
500
Milliarden
2022

Quelle: japantimes.co.jp/news/2014/09/30/asia-pacific/hong-kong-democracy-protesters-set-deadline-for-demands/





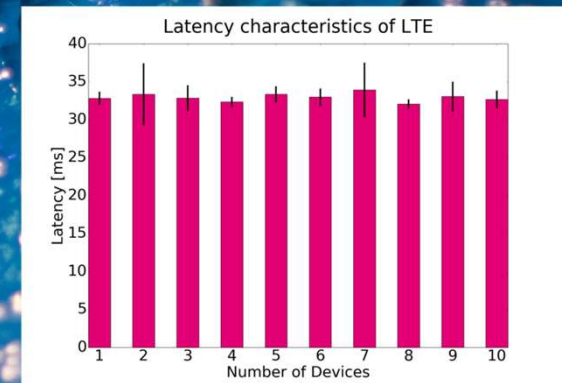
Quelle: japantimes.co.jp/news/2014/09/30/asj-pacific/hong-kong-democracy-protesters-set-deadline-for-demands/



Das Taktile Internet



30ms round-trip time → 1ms



Gaming: Sie waren die ersten ...



Free Viewpoint Video

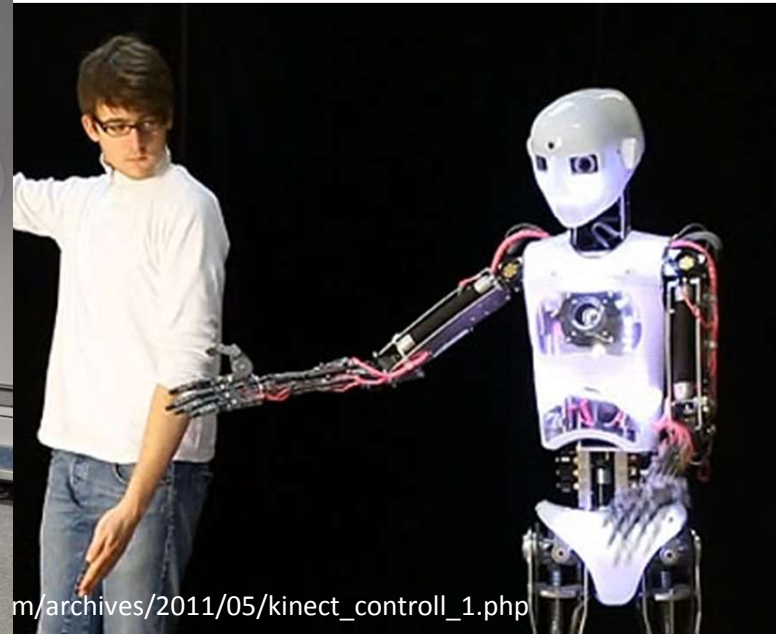
10 Kameras @ 100Hz frame rate → 100Gb/s
< 10ms Latenz, 1-10ms Synchronität!!!



Ferngesteuerte Humanoide Robotor



Ferngesteuerte Humanoide Robotor



Die neue Lagteinklasse



Saarbrücken

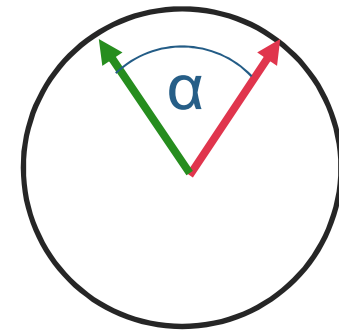
Altenpflege



Landwirtschaft



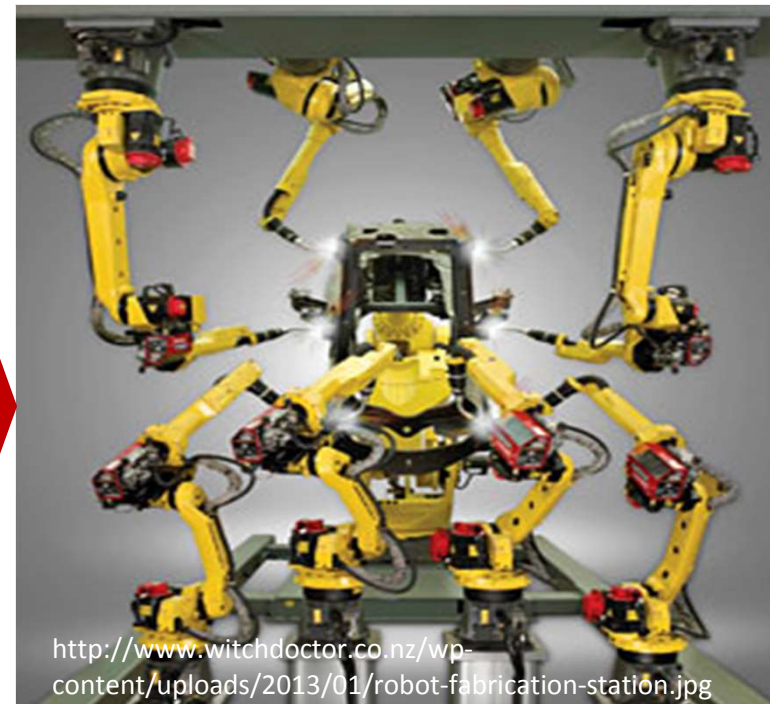
Smart Grids → Blindleistung / Kurzschluß



1ms

18°

Industrie 4.0



Neue Arbeitswelten



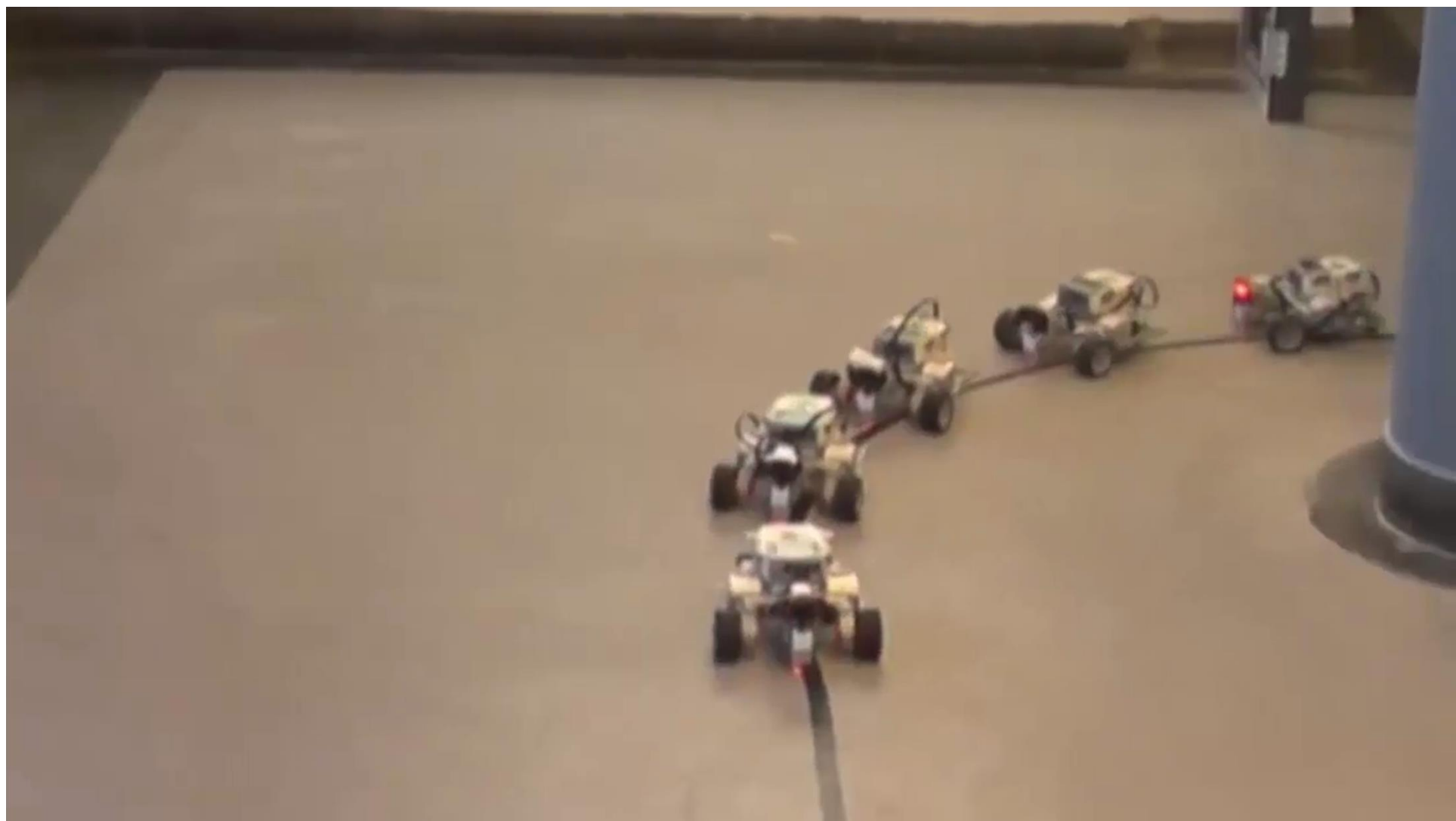
Vernetztes Fahren- Platooning

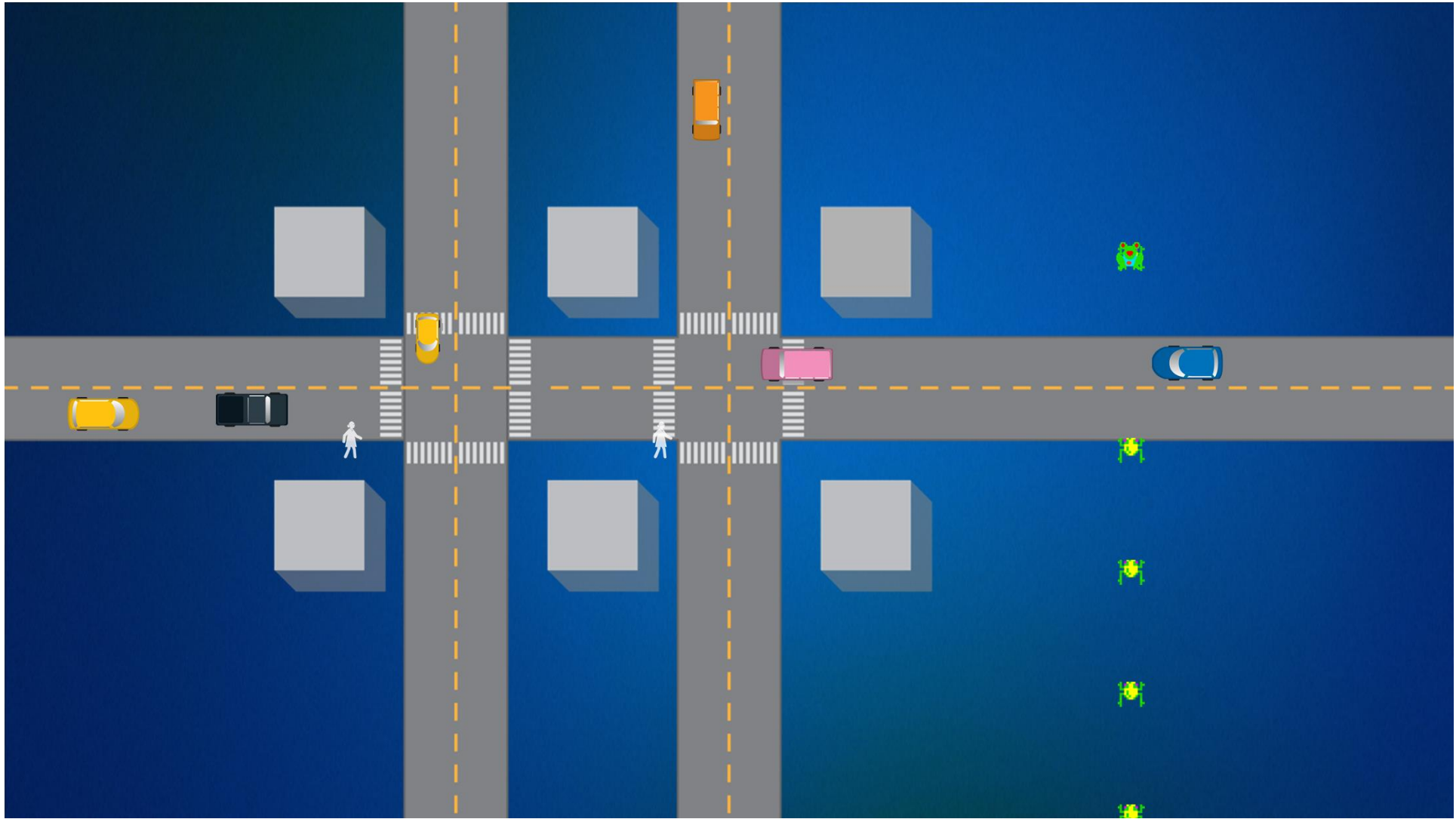
1-2 ms: ESC, ABS



Bald platooned ESC & ABS





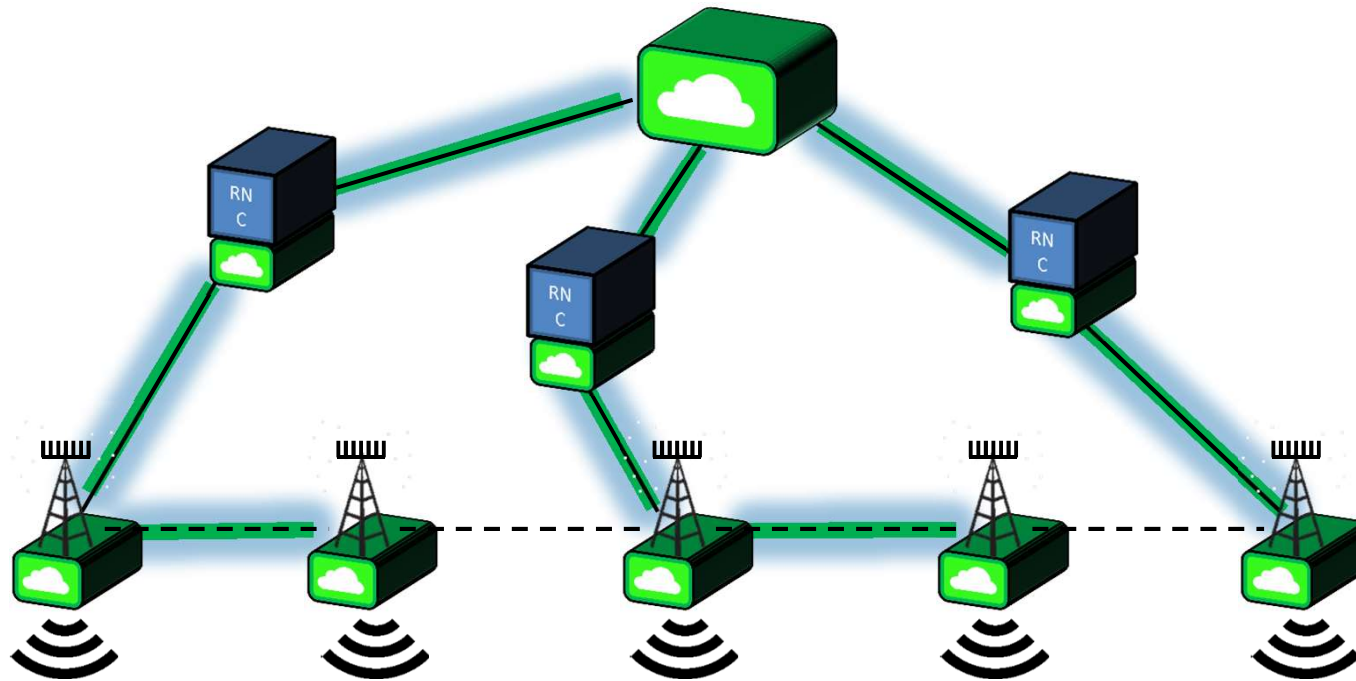


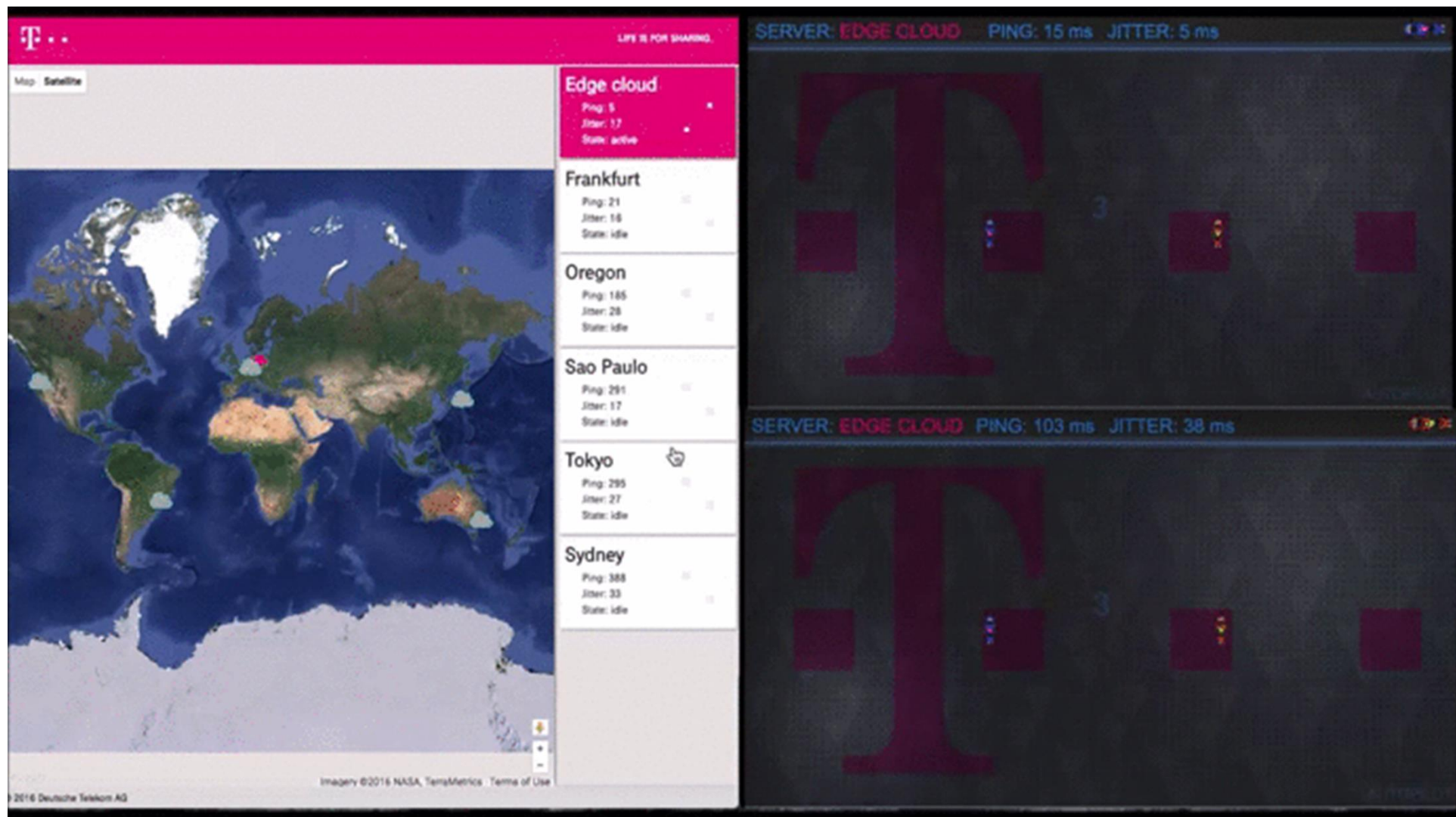


A photograph of a Nokia exhibition booth at the Mobile World Congress 2016. The booth features a large, illuminated 'NOKIA' logo in the background. In the foreground, a sleek, futuristic concept car is displayed on a circular platform with a checkered floor. Several people are gathered around the car, observing it. The scene is set in a large, modern exhibition hall with a high ceiling and industrial lighting.

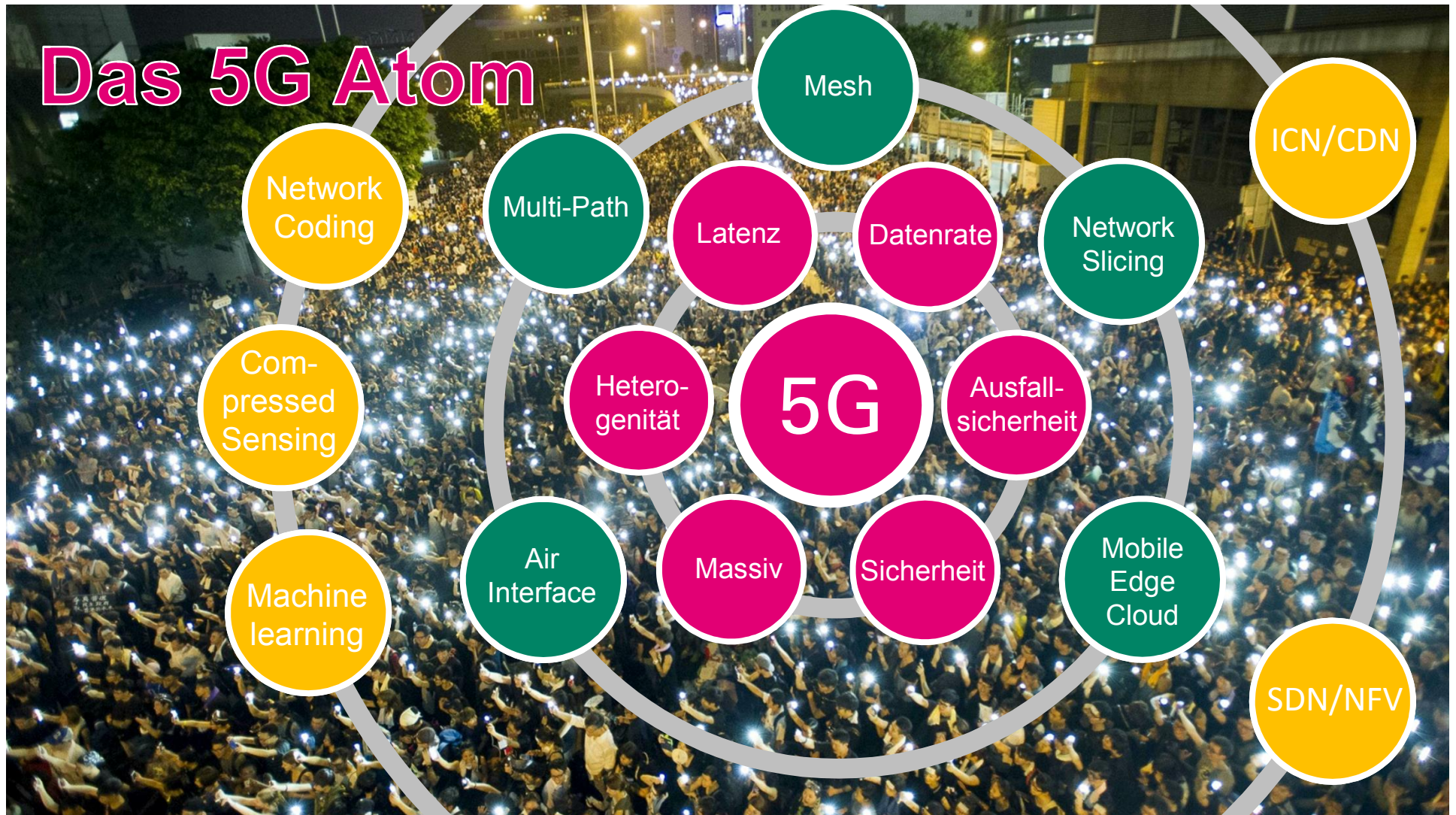
Mobile World Congress 2016

Mobile Edge Cloud – Das Netz bewegt sich





Das 5G Atom



5G macht alle glücklich!

